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Textese and use of texting by children with typical language development and Specific Language Impairment

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ABSTRACT

The purpose of this study was to investigate texting and textese, which is the special register used for sending brief text messages, across children with typical development (TD) and children with Specific Language Impairment (SLI). Using elicitation techniques, texting and spoken language messages were collected from 55 children with TD and 15 children with SLI between 10 and 13 years old. The results show that text messages in the two groups were of equal length, but the children with TD used more textisms (alternative ways of spelling words) than the children with SLI. Both groups omitted words in their texting messages with similar frequencies, but while the SLI group omitted words equally frequently in texting messages and spoken language messages, omissions in the TD group were more specific to texting. This suggests that TD children omit words in texting because it is a register-specific convention, whereas children with SLI omit words regardless of the register. Socio-emotional reasons to use texting were found to be relatively important for children with SLI. This may be related to their higher level of shyness.

1. Introduction

Nowadays, many school-aged children communicate by exchanging brief text messages between mobile phones through instant messenger services such as Short Message Service (SMS) or WhatsApp, henceforth referred to as texting. An intriguing aspect of texting is the use of a special register called 'textese', which is characterized by unconventional spelling and grammatical short-cuts. Despite the growing body of research on texting and textese (see Verheijen, 2013; for an overview), hardly any studies have researched texting and use of textese by children with communicative challenges, such as children with Specific Language Impairment (SLI) (Conti-Ramsden, Durkin, & Simkin, 2010; Durkin, Conti-Ramsden, & Walker, 2010; Durkin, Conti-Ramsden, & Walker, 2011).

Studying texting in this group of children in comparison with typically developing children (TD) provides insight into the effects of SLI across modes of communication, including computer-mediated communication. It also sheds light on the question as to whether the use of textese is associated with poor or with well-developed language skills (Crystal, 2008). In spoken language, children with SLI stand out because their language resembles the speech of younger children and is characterized by word finding problems, the omission of words and use of short utterances (Leonard, 2014). In texting, omitting words is allowed, hence in text messages the language deficit of children with SLI may be less obvious than in spoken interactions, making texting a potentially attractive means of communication for them. While this has been suggested for adolescents with SLI (Durkin, Conti-Ramsden, & Walker, 2009), virtually nothing is known about the texting behavior and preferences of younger children with SLI. The aim of the present study was to explore texting and textese in a small sample of Dutch children with SLI between the ages of 10 and 13, in comparison to a larger sample of children with typical development (TD) and a child-by-child matched TD sample.

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1.1. Texting and textese

When mobile phones were introduced, text messages had to be paid and were limited to 160 characters (SMS). This limitation has become irrelevant with cost-free, web-based applications such as WhatsApp, which is a cross-platform instant messaging application for smartphones. However, although the cost or the number of characters is no limitation anymore, time remains a relevant restriction as text messages are often sent fast explaining why textese still exist. Many characteristics of textese indeed suggest that the main goal of texting is to obtain high information value in the fastest and most resource-efficient way. For instance, there is a variety of textisms that lead to greater efficiency on the side of the producer because they are reductions at the word-level, such as contractions (*tmrw* for 'tomorrow'), phonological replacements (*thru* for 'through'), initialisms (*ttyl* for 'talk to you later'), clippings (*goin* for 'going'), or single letter/number homophones (*c* for 'see', *4* for 'for'). Other textisms, such as repeating letters to mirror lengthening (*sooooo* for 'so') or accent stylizations (*gonna* for 'going') (Verheijen, 2013) can be less well understood from the perspective of resource-efficiency and are phonetic realizations of spoken language varieties. As such, they carry pragmatic information and add to the information value, which is particularly important in the absence of face-to-face interaction. Besides reductions at the word-level, texting is characterized by reductions at the sentence-level (*am going out now. want to come?*). Again, the main goal here seems to be to maintain the meaning of the sentence and use as little time and space as possible.

The above examples show that textese transgresses standard orthographic conventions and grammatical rules, which has led to debates and concerns. Two quotes illustrate the two opposing views. According to Sutherland (2002), texting language is "thin and unimaginative …. mask[ing] dyslexia, poor spelling skills and mental laziness" while Thurlow (2003) states that texting language is "communicatively adept", "creative" and has a "robust sense of play".[1] Some suggest that textese is a form of "linguistic whateverism" (Baron, 2008, p. 169), which refers to an attitude that is primarily marked by indifference regarding linguistic consistency, whereas others identify principles that underlie the genre (Crystal, 2010). For instance, consonants are more often maintained compared to vowels because consonants are more usable than vowels for the identification of the intended meaning (Nespor, Peña, & Mehler, 2003). Along similar lines, it may be expected that sentence-level omissions comprise more often function words than lexical words, given that lexical words are commonly characterized having a more specific or detailed semantic content than function words and carry the principal meaning of a sentence (Corver & Van Riemsdijk, 2001, pp. 1–19).

The opposing views on positive versus negative effects of texting on literacy are reflected in studies about children and adolescents' use of textese. It has been suggested that in education, learners should be informed about the differences between textese and standard grammar, to prevent detrimental effects of frequent texting (Cingel & Sundar, 2012, p. 1317). Some findings indeed suggest negative associations between texting measures and literacy related outcomes (Plester, Wood, & Bell, 2008; Wood, Kemp, & Waldron, 2014) and grammatical abilities (Cingal & Sundar, 2012; Kemp, Wood, & Waldron, 2014). However, most studies show positive correlations between texting measures and literacy outcomes and demonstrates that children who text more and use more textese score better at assessments of literacy skills (Bernicot, Goumi, Bert-Erboul, & Volckaert-Legrier, 2014; Bushnell, Kemp, & Martin, 2011; Coe & Oakhill, 2011; Kemp & Bushnell, 2011; Plester et al., 2008; Plester, Lerkkanen, Linjama, Rasku-Puttonen, & Littleton, 2011; Plester, Wood, & Joshi, 2009; Wood, Meachem, Bowyer, Jackson, Tarczynski-Bowles, & Plester, 2011; Wood, Jackson, Hart, Plester, & Wilde, 2011; see also Verheijen, 2013; for an overview) and no (Wood, Kemp, & Waldron, 2014; Wood, Kemp, Waldron, & Hart, 2014b) or positive associations between texting measures and grammatical skills (Van Dijk, van Witteloostuijn, Vasić, Avrutin, & Blom, 2016).

Nearly all studies on texting and textese have focused on TD children. A handful of studies have compared texting behaviors and textese across individuals with TD and developmental dyslexia (Hsu, 2013; Simoës-Perlant et al., 2012; Veater, Plester, & Wood, 2011), driven by the observation of Plester et al. (2009) that texting language is related to good performance in orthography. However, texting is a genre that, despite its written form, shares at least as many properties with spoken language as it shares with written language (Crystal, 2010). For instance, it is time-bound, spontaneous, loosely structured, and interactive. Therefore, it is also relevant to investigate texting and textese in children who have persistent difficulties with spoken language, like children with SLI (Durkin et al., 2011).

1.2. Specific Language Impairment

SLI is a language disorder that affects about 5–7% of the population (Tomblin et al., 1997). The effects of SLI are heterogeneous: different subdomains of language can be affected and the symptoms vary in severity (Leonard, 2014; Schwartz, 2009). One domain that is typically influenced by the impairment is grammar and the ability to use complex and well-formed sentences. For instance, in spoken language, children with SLI use shorter sentences than their peers with TD and they omit words. By far, most research on SLI has focused on the spoken modality. Dockrell, Lindsay, Mackie, and Connolly (2007) analyzed the written language of children with SLI and observed that, amongst other differences, 10-year olds with SLI produce shorter texts than their TD peers, suggesting that the weaknesses of children with SLI are not limited to talking and understanding speech.

In a series of studies, Durkin and colleagues explored various aspects of computer-mediated communication (CMC) – an umbrella notion covering email, MSN, SMS, Facebook, WhatsApp - in groups of adolescents with TD and SLI. Durkin, Conti-Ramsden, Walker, and Simkin (2009) found that the majority of the adolescents with SLI in their study used CMC, and they sent the same number of messages and spent a similar amount of time using CMC as their peers with TD. Non-CMC-users had low language and literacy skills, but in the subsample of CMC-users language and literacy outcomes were not predictive of CMC engagement. Linguistic reasons for using CMC (e.g., not worry about spelling, typing instead of talking, lots of time or write and read messages) were relatively important for participants with SLI, while social reasons were equally important in the two groups. Comparisons of SMS messages revealed that the messages sent by adolescents with SLI were shorter than those of their peers with TD and contained fewer textisms (Durkin et al., 2011). Like the studies by Durkin and colleagues (Durkin et al., 2009, 2011), we investigated how SLI affects texting, but in contrast to these previous studies, our study was focused on children instead of adolescents.

[1] It may be worth noting that Sutherland and Thurlow have a distinctively different background (respectively English literature and communication), and that Sutherland's quotes are derived from an article published in a non-academic venue (Guardian).